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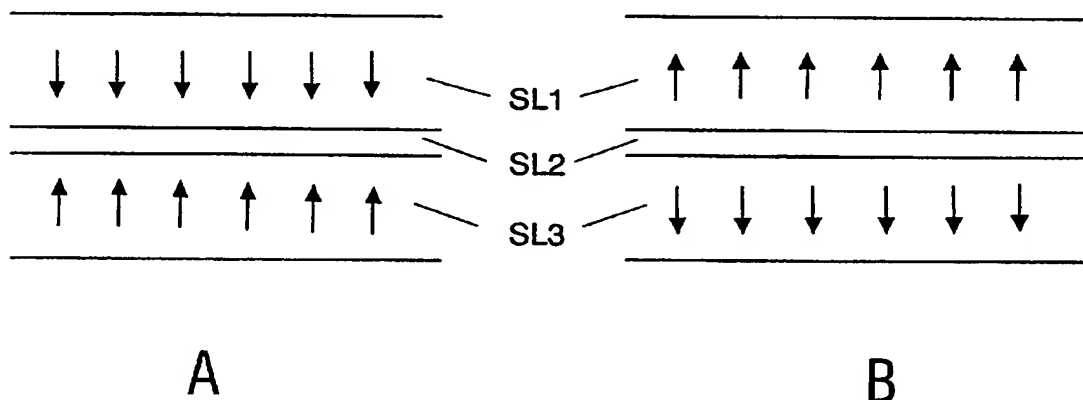
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(54) Title: **THERMALLY-ASSISTED RECORDING MEDIUM WITH A STORAGE LAYER OF ANTIFERROMAGNETIC DOUBLE-LAYER STRUCTURE WITH ANTI-PARALLEL ORIENTATION OF MAGNETIZATION**



(57) **Abstract:** The present invention relates to a thermally-assisted recording medium comprising a storage layer consisting of a double-layer structure of antiferromagnetically coupled first (SL1) and second (SL3) layers with substantially the same composition, wherein the first and second layers are adapted to have an antiparallel orientation of magnetization. Due to the antiparallel orientation of the magnetization of the two layers during cooling down, subdomain formation is suppressed and uniformly magnetized domains can be written with a reduced external field. This has main advantages for power consumption of portable applications and opens the possibility to apply magnetic field coils for recording at higher data rates.